BONNEVILLE
POWER ADMINISTRATION

Transmission Business Line (TBL)

Available Transfer Capability Methodology for Short Term Firm Requests on the Network

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The Bonneville Power Administration's (Bonneville) Open Access Transmission Tariff (Tariff) provides that Bonneville's Available Transfer Capability (ATC) methodology will be posted on the OASIS. On November 12, 2003, as revised from time to time, Bonneville's Transmission Business Line (TBL) issued the ATC methodology that measures physical flows on constrained paths internal to Bonneville's main grid integrated network facilities (Network) resulting from requests for long-term firm service on the Network (LTF ATC Methodology). The current document establishes an ATC methodology to measure physical flows on certain constrained paths internal to the Network resulting from requests for short-term firm service on the Network (STF ATC Methodology).

The ATC determination for short-term firm requests over constrained paths interconnecting with other transmission systems (External Interconnections) and Interties will continue to use a Contract Accounting Methodology.[1]

A. Definitions:

Annual LTF ATC: Annual resolution is derived from the lowest value of the monthly resolution of ATC in a calendar year over the network flowgate as determined for Long Term Firm transmission requests.

Available Transfer Capability (ATC): A measure of the transfer capability remaining in the physical transmission Network for further commercial activity, over and above already committed uses.

External Interconnections: include the Northern Intertie, Malin-Hilltop, West of Hatwai, West of Garrison and LaGrande paths.

Interties: Southern Intertie (AC Intertie and DC Intertie) and the Montana Intertie.

Long-Term Firm (LTF): Transmission service reserved in yearly increments for periods of at least one year.

Long-Term Firm or LTF ATC Methodology: The ATC Methodology issued November 12, 2003, as revised, as posted on the OASIS.

Monthly LTF ATC: Monthly resolution of ATC over the network flowgate as determined for LTF transmission requests.

Short-Term Firm (STF): Transmission service reserved for periods less than one year.

Transmission Reliability Margin (TRM): That amount of transmission transfer capability necessary to provide a reasonable level of assurance that the interconnected transmission network will be secure under a broad range of uncertainties.

B Short-Term Firm Methodology

1. Calculating Short-Term Firm ATC

The following formula is used to calculate the ATC for each STF Network Flowgate, effective with STF ATC posted for July 2004:

STF ATC = (Monthly LTF ATC – Annual LTF ATC) + Adjustments

The initial STF ATC will contain the following formula adjustments for the months of July and August 2004. Thereafter, on the last business day of the

[1] See Appendix 2, Long Term Firm ATC Methodology.

current month, the formula adjustments are applied to the STF ATC for the fourth month (days 90 through 120) from the date of the adjustment.

- Remove TRM applied to each network flowgate in the LTF ATC Methodology.
- Add ATC attributed to requests for LTF that is incorporated into Annual LTF ATC, but for which TBL does not expect to offer or have executed contracts in place prior to the posted month.

The TBL reserves the right to modify these adjustments at any time.

2. STF Network Flowgates

The STF Network Flowgates include the following network flowgates, as established and defined in the LTF ATC Methodology:

Monroe-Echo Lake	Allston-Keeler	West of McNary
Raver-Paul	North of Hanford	West of Slatt
Paul-Allston	North of John Day	

The TBL reserves the right to modify STF Network Flowgates at any time.

C. Designation of Deemed Points of Receipt and Points of Delivery

In the LTF ATC Methodology TBL uses Path Utilization Factors (PUFs) as the basis for determining the portion of power that will flow over a particular network flowgate between a specific point of receipt (POR) and point of delivery (POD) on the Network.[2] PUF values are calculated for each network bus (substation name and voltage) point and for each network flowgate.

PUF values are also used to determine ATC for STF requests. TBL has assigned or "deemed" network bus points for interconnections with certain generation projects, adjacent electrical systems or load serving entities, and trading hubs. These points were identified because they represent the primary interface between Bonneville and the adjacent electrical system, load serving entity, generation project or projects or trading hub. Some interconnections with adjacent electrical systems have different points deemed as a POR or POD because the primary load or generation for such system is concentrated in different locations. The PUF values used for the POR representing the Federal base system (the "BPAPower" System) are derived from a "Weighted FCRTS" bus point, and are based on the PUF values for the month of July provided in the Network LTF ATC methodology, which assumes a specific generation dispatch pattern for such month.[3]

TBL reserves the right to modify the Deemed PORs and PODs as needed.

The PUF values are calculated for each point and for each STF Network Flowgate. Path Utilization Factors for STF ATC are available on the ATC Methodology page of TBL web site at: http://www2.transmission.bpa.gov/Business/Customer_Forums_and_Feedback/ATC_Methodology/ (See the Short-Term ATC Methodology section).

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[2] See Appendix 5, LTF ATC Methodology.

[3] See Appendices 5 and 6, LTF ATC Methodology.

TBL reserves the right to update the PUF values at any time.

1. Calculating the STF Network Flowgate Impact

TBL uses the following equation to calculate the STF Network Flowgate impact of a request:

*Impact to Flowgate = (Bus Point 1 PUF for Flowgate – Bus Point 2 PUF for Flowgate) * Demand (in MW)*

2. Evaluating STF ATC Requests

The STF Network Flowgate Impact is compared to the STF ATC across the STF Network Flowgates to determine if ATC is sufficient for the request to be set as ACCEPTED. If the ACCEPTED request is CONFIRMED by the customer, STF ATC is decremented from the STF Network Flowgate as appropriate to the circumstances.[4]

D. De Minimis Impact

For each Short-Term Firm transmission request using a STF Network Flowgate where the PUF value is less than or equal to 10 percent *and* the resulting impact on the flowgate is less than or equal to 10 MW, the transmission request will be deemed to have a de minimis impact on that STF Network Flowgate, and the impact on that flowgate will be ignored. ATC over that STF Network Flowgate will not be decremented for that transaction.

TBL will track the actual flow of power on each STF Network Flowgate on a monthly basis. If the actual flow on an STF Network Flowgate is close to or exceeds the Operating Transfer Capability (OTC) for such flowgate, TBL will not accept further requests with de minimis impacts on that flowgate.

E. Losses

All Short-Term Firm transmission requests, including transmission requests to return losses, will be processed in queue order on a daily basis. All transmission requests to return losses that do not affect External Interconnections or Interties will be accepted. Transmission requests to return losses over External Interconnections or Interties will be accepted based on queue priority and ATC, subject to the operation of the Tariff reservation priority for requests for Short-Term Firm service.

F. Short-Term ATC Results

TBL will post STF ATC, as follows:

- STF ATC will be posted for a rolling 14–month period (430 days).
- STF ATC will be updated daily to reflect new firm commitments for short-term transmission.
- Impacts of planned outages on a STF Network Flowgate will be incorporated as soon as the OTC is determined by studies and becomes available (typically two

[4] The terms ACCEPTED and CONFIRMED, as used here, have the same meaning as such terms are defined in the "Open Access Same time Information System and Standards of Conduct; Final Rule, 18 CFR Part 37.

weeks prior to such outage). A revised STF ATC will be computed for the affected STF Network Flowgate.

- On the last business day of current month, formula adjustments will be incorporated into the STF ATC values for the fourth month (days 90 through 120) from the date of the adjustment.

ATC results are updated and posted on Bonneville Power Administration's OASIS in accordance with FERC requirements.

An illustrative example of ATC results is available on the ATC Methodology page of TBL web site at: http://www2.transmission.bpa.gov/Business/Customer_Forums_and_Feedback/ATC_Methodology/.